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(12) United States Patent

Souluer

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(54) REFRESHABLE BRAILLE DISPLAY UNIT

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58) **Field of Search** 400/483, 87, 109.1;

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(57) ABSTRACT

A refreshable display unit with a housing, a plurality of refreshable cells housed in the housing, the cells having a guide block with at least six holes, six motors each with a coupler which may be rotated by the motor, a pin fastened to each coupler and extending into engagement with one of the holes of the guide block, and a stop mounted on each coupler for engaging stop elements mounted on the housing for limiting the rotation of the coupler, the placement of the stop elements on the housing being such that it controls the height extension of the pin fastened to the coupler with respect to the guide block, the unit further having a connector for connecting the display unit to the electronic means of a computer. A unit may have a plurality of keys for inputting a character, including at least two sets of keys, a first set being used when the keyboard is oriented in a first direction and a second set being used when the keyboard is oriented in a second direction.

32 Claims, 5 Drawing Sheets

